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ABSTRACT

Universals in nonverbal behavior represent an important issue in the study of the cross-cultural communication. Perhaps the most well-known research in nonverbal universals was conducted by Paul Ekman, who examined literate and preliterate cultures from various language groups and identified six universal facial expressions: happiness, sadness, disgust, surprise, fear and anger. Another notable researcher, Irenaus Eibl-Eibesfeldt, studied children born with sensory, mental, and physical deprivations and discovered crucial factors in the roles played by learning and inheritance in the development of expressive behavior. He also conducted important research on universals in approach-avoidance behavior. Other research has focused on the development of the human smile and two other closely related nonverbal universals: mutual gaze and the infantile eye fixation. Other nonverbal universals studied include interactional synchrony, body movement and speech rhythm, quasi-courtship behavior, and turn-taking. Researchers offer conflicting explanations of the historical development of universal human communication structures. A position supporting genetic-environmental interaction balances these explanations. The concept of survival value seems to be the most reasonable explanation of the exact origin of specific behaviors. However, the notion of opposites represents a deeper, unifying structure in cross-cultural communication that ties together theories of nonverbal behavior, linguistics and myth. (JD)

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Universals of Nonverbal Behavior:

A Review of Literature

and Statement of Implications

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by

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One of the fundamental precepts of human communication is that it is made possible through the sharing of some code system. The root of the term communication is the Latin phrase meaning "to make common." (Pearson and Nelson, 1985) Communication "makes common" the workings of two or more minds. The communication behaviors I engage in are a tap into my thinking. They are my mind's extension into the outside world. The codes around which I clothe my thoughts serve to put my ideas into sendable, receivable form. To the extent that another person and I share word and non-word codes, then the potential exists for us to have much "in common." It is the code sharing that makes this communion possible.

When one considers the area of cross-cultural communication, he is using virtually contradictory terms. Commonality of codes almost presupposes commonality of culture. The greater the differences between two cultures, the less is the probability that any significant amount of shared codes exists. The easiest cross cultural communication would seem to be with those who live in an environment similar to mine and whose language is linguistically kin. If one accentuates differences in word and non-word communication behaviors because of cultural variation, effective cross-cultural communication seems difficult, if not impossible.

But can't this perspective lose sight of a deeper precept of communication? To the extent that all mankind share a common origin and nature, and to the extent that all human minds are essentially alike, all communication therefore should have some commonality. As surely as communication taps into and reflects the deeper realities of man's cognitions, so should it also display universal tendencies. To argue in favor of universal communication behavior is not to deny cross-cultural variation. That the greeting behavior of Copper Eskimos (Malandro and Barker, 1983)

varies from that used in midwestern America is not to deny the existence of a form of greeting. Though details of the greeting behavior change from culture to culture, the existence of a type of behavior is nevertheless supported. Too often researchers have accentuated these obvious differences in communication behaviors to the neglect of less obvious commonalities. As we consider, then, cross-cultural communication, what more appropriate concern could there be than that of communication universals which bridge the cultural gaps between people. For the purposes of our consideration here, I have chosen to confine my discussion basically to nonverbal behaviors. As compared to language systems, nonverbal behaviors are relatively free of artificial or created structure. Thus, they may more directly tap the calculus underlying universal behaviors. Specifically, I will examine some major research in nonverbal universals and posit certain theoretic implications these findings have for our views on cross-cultural communication.

Perhaps the most thorough and well-known research in nonverbal universals has been conducted by Paul Ekman (1971). In examination of five literate and two preliterate cultures drawn from six language groups, he "isolated and demonstrated the basic set of universal facial expressions of emotion." (Ekman, 1971, p. 277). The six facial displays that appear to be universal are happiness, sadness, disgust, surprise, fear and anger. Certainly, he admits, the display rules of these faces may vary and what evokes the displays changes from culture to culture. Nevertheless, his and other's research (Ekman, 1971) confirm the universality of certain facial expressions.

As one considers universals of nonverbal behavior, one must also examine the work of Irenaus Eibl-Eibesfeldt. His studies of children born with sensory, mental and physical deprivations hold some crucial keys in the evaluation of the roles played by learning and inheritance in development of expressive behavior. Based

on several studies of children born deaf and blind, he derived the following list of expressive behaviors produced spontaneously by his subjects:

> smiling, laughing, crying in distress and anger, frowning, pouting, surprise reactions, head shaking as a gesture of refusal, turning around and walking away, clenching teeth, clenching fists, stamping feet, biting of own hands and lips, jerking back of the head, strong exhaling, contact seeking by embracing movements, contact seeking by reaching out, signalling on the hand with the palm facing out, caressing, nibbling, rubbing the forehead against a person
> (Eibl-Eibesfeldt, 1973, pp. 190-191.)

All of these behaviors were manifested as expressions of or responses to varying emotions. He concludes that many of our expressive behaviors are inborn, the result of "fixed action patterns" (Eibl-Eibesfeldt, 1973, p. 192). One interesting observation he has made is that the expressions of the deaf-and-born-blind "often lack the minute gradations" of normal children. "An expression suddenly appears, and equally suddenly wanes without warning, leaving a completely blank face" (Eibl-Eibesfeldt, 1973, p. 192). He relates other instances of expressive behaviors. Children born blind and deaf exhibit nonverbal signs of shyness toward strangers (Eibl-Eibesfeldt, 1971). One ten year old born-blind girl blushed when praised. She looked at the researcher, dropped her gaze, turned her head away, and then looked back in a typical display of shyness. In another instance an eleven year old born-blind boy, when asked if he had a girlfriend, hid his face behind his hands and looked down (Pitcairn and Eibl-Eibesfeldt, 1976). Typical patterns of smiling and crying even occurred with a severely retarded microcephalic child (Eibl-Eibesfeldt, 1976).

Along with his observation of deprived children, this researcher has also noted other behaviors which he feels to have some type of a universal representation.

For purposes of classification, I shall subdivide these behaviors into either approach or avoidance categories (Malandro and Barker, 1983). Approach behaviors compel or allow contact. Avoidance behaviors are designed to repel.

Many basic approach behaviors are related to mother-infant interaction and the bonding process. The cuddliness and attraction of the small infant is characterized by its chubby cheeks, high forehead, large eyes, a small mouth, large head and chubby body. These characteristics compel attraction. The child seems to have an innate desire to form ties with one person. "Even at a very early stage children, by means of initiative gestures, elicit and strengthen social contact." (Eibl-Eibesfeldt, 1971, p. 209.) Those behaviors which evoke and sustain mother-infant bonding should be universal. Eibesfeldt (1971) even feels that extensions of these behaviors later in life are responsible for bonding in adult relationships. He states, "The means of bonding have always remained fundamentally the same . . . The mother-child relationship is undoubtedly the nucleus around which the human community has crystallized." Humans, he says, "have a strong innate urge for sociability" (Eibesfeldt, 1971, pgs. 217, 233). Thus, we could conclude that human bonding rituals would be universal in nature. Extending the hand, feeling, patting, embracing, caressing are all gestures granting contact derived from parental care behavior. The offering of gifts and food to others are a form of bonding or aggression appeasement. He even notes that kissing may have derived as a ritualized form of parental feeding (Eibesfeldt, 1971). Certainly the smile would be classified as a bonding behavior as would types of gazing. Related to these bonding behaviors would be actions connoting appeasement or surrender. Laying down weapons and the making of oneself smaller through bodily prostation, kneeling or bowing would all have a bonding or submission effect. Certainly these would be approach behaviors. Many of the bonding behaviors already mentioned could be classified as forms of

greeting and leave-taking. Embracing, caressing, handshaking, and raising an open hand, though not all universal behaviors, are common in greetings. Pitcairn and Eibesfeldt (1976) have found a contancy in gaze patterns before and during greetings. "The eye contact patterns of the approacher" (Pitcairn and Eibesfeldt, 1976, p. 98) are invariant. The researchers describe a distant salutation, head bob, upper smile, a direct look then approach, gaze aversion and the making of contact. After this last approach-phase contact, comes a close greeting followed by a cut-off, then a turning away, a reestablishment of contact and a continuance of interaction. This sequence of greeting has been observed in various cultural groups, with infants and with certain primates (Pitcairn and Eibesfeldt, 1976). The eyebrow flash in greetings is also a universal approach signal. Eibesfeldt (1971) also mentions some other varied approach behaviors that are common cross-culturally. These are weeping and lamenting, tongue flicking as flirting, the love bite, sexual smells, and pupil dilation. His contention is that man is good by natural inclination. These approach behaviors are pre-programmed expressions of man's altruism that has its roots in the mother-infant relationship.

But as man has a social drive for altruism, so he also has a drive for aggression. This manifests itself in the form of avoidance behaviors. Eibesfeldt (1971) also mentions some of these. He cites territorial defense and the types of behaviors accompanying it as being aggressive. As well, other types of threatening behaviors, not unlike those of apes, also exist in man. Specifically one can note the accentuation of the shoulders, as in certain military uniforms. This is comparable to the defensive display by apes of the raising of the hair on their shoulders to ward off attack. The stamping of feet and the baring of canine teeth are also avoidance behaviors seen in man. Prolonged eye contact is considered an aggressive behavior (Pitcairn and Eibesfeldt, 1976). The headshaking for "no" is a type of avoidance behavior perhaps derived from a child's refusing the breast when satiated (Eibesfeldt, 1979).

As mentioned earlier, Eibesfeldt (1971) feels many of man's expressive nonverbal behaviors, both approach and avoidance, to be inherited and therefore universal. He feels that innate releasing mechanisms in the body cause us to respond instinctually to certain stimuli. Certainly, facial expression would serve to demonstrate this. He also argues that because a behavior is inherited doesn't mean it can't be conditioned. Adaptive human behaviors are born of interaction between the individual and the environment. These behaviors help us adapt and act to conserve the individual and the species. Eibesfeldt also feels that many of these expression behaviors of ours are inherited from our primate ancestors. He cites homologues in shoulder accentuation, laughter, and smiling to support his contention (Pitcairn and Eibesfeldt, 1976).

At this point, it would be wise to consider some more extensive and specific research on a universal of human nonverbal behavior, the smile. Adult smiling occurs in most human cultures (Vine, 1973). It seems to signal a friendly, subordinate stance (Scott, 1976) and is an invitation to approach. Smiling in the infant as a response to social stimuli emerges from two to eight weeks of age (Vine, 1973). Its purpose seems to be to provide reinforcement and reward to caretakers. During an infant's first year of life faces with eyes elicit smiles. Unfamiliar faces can also cause negative reactions. Smiling seems to develop in accordance with the child's maturation. And perceptual development, especially, seems to be critical in aiding it to emerge in the normal child (Vine, 1973). However, reflecting on Eibl-Eibesfeldt's work with the children born-deaf-and-blind, one must conclude that a certain level of smiling emerges independent of normal perceptual maturation. Thus, an abolutist's position as to the roles played by environmental, sensory, or genetic material in the emergence of the human smile would seem to be a bit precipitant.

Coincident with smile emergence are two other closely related nonverbal behaviors. Mutual gaze between infant and adults also plays a part in the development of the social smile (Vine, 1973). Mutual gaze is ". . . the perceptual cornerstone of early communication and attachment" (Vine, 1973, p. 248). Such gaze patterns serve to facilitate the mutual smiling (Vine, 1973) and extended face-to-face interactions which are unique to man as a species (Pitcairn and Eibesfeldt, 1976). Mother-infant mutual gaze interacts with their development of mutual smiling. This mutual gaze increases during the first three months of the infant's life. Research even shows that the mother can contribute to its development by having a positive attitude toward her pregnancy. Infants that receive more visual stimulation from their mothers early in their lives, have lower gaze aversion and fear indices (Vine, 1973).

In particular, gaze for the infant focuses on the eyes. Faces with eyes provoke more smiling from the infant than do eyeless faces (Vine, 1973). Vine (1973) hypothesizes that the infantile eye fixation occurs because two eyes is the first aspect of the face the infant integrates into his internal schema. It is a "recognition response elicited by successful matching of a perceptual input to an internal model of a familiar object" (Vine, 1973, p. 249). However, one cannot deny the real, even mystical power of the eye in human culture. Animals have eye spots on certain body parts to encourage or discourage predatory attack. The eye in human culture is a frequent symbol of knowledge and power. The use of eye make-up and pupil dilation produces accentuated eyes and eye spots. The arc of the brows even draws attention to this area of the body (Hindmarch, 1973). Some research (Maloney, 1976) shows an extensive cross-cultural belief in the evil eye and the power of the eye to inflict harm. Clearly, this infantile eye fixation has some extensive repercussions.

Up to this point we have considered research in universals of nonverbal behavior in the following categories: facial expression, various expressive behaviors, approach-avoidance behavior, smiling and mutual gaze. There are some other nonverbal categories that would appear to be universal. Some of these would include interactional synchrony (Condon and Ogston, 1966), body movement and speech rhythm (Dittman, 1974), quasi-courtship behavior (Scheflen, 1974), and turn-taking (Duncan, 1974). Intuitively one would expect these all to be universal in nature. However, the clearest research seems to rest in the five initial areas I mentioned.

If there are some universals of nonverbal behavior, what are the theories for their origins? Generally, many researchers hold the position that much of our communication behavior is genetically based. Communication structures of humans may have arisen because of a need for contact within the species (Klopfer, 1976). "Communication patterns, like other behaviors, are the outcome of a series of transactions between organism and environment" (Fuller, 1976, p. 35). It is unlikely there is a "master gene integrating the components of a complex pattern, courtship for example, into an effective whole" (Fuller, 1976, p. 35). The genes serve to predispose the "nervous system to produce the basic species repertory, leaving the individualization process to the milieu" (Fuller, 1976, p. 37). Indeed the generalization of gentic data to mammalian communication patterns is difficult because these behaviors tend to be much less stereotyped than others (Fuller, 1976).

With regard to two specific nonverbal universals, some researchers have made specific claims about origins. Eibesfeldt (1971) feels that many human patterns of expression are derived from apes. He notes several homologues between primate and human facial expression. These include expressions of horizontal bare teeth, vertical bare teeth, open mouth bare teeth and play face bare teeth (Pitcairn and Eibesfeldt, 1976). However, another researcher contends the smile is a novel

behavior of humans, having evolved by itself (Scott, 1976). Both Paul Ekman (1973) and Suzanne Chevalier-Skolnikoff (1973) feel that the origin of human facial expression is rooted in man's evolutionary past. "The facial expressions of nonhuman primates and man are similar . . . supporting his (Darwin's) theory that human facial expressions have evolved from those of man's nonhuman primate ancestors" (Chevalier-Skolnikoff, 1973, p. 83). There also seems to be some proof (Vine, 1973) that the development of infantile smiling is related to perceptual maturation.

Given the existence of these nonverbal universals, (see R. Hinde, 1972) a common mechanism within man must be responsible for their production. The most harmonious position would seem to be that of genetic-environmental interaction. Such a proposition would account for some basic nonverbal invariability and at the same time explain some environmental variations. The question of the exact origin of specific behaviors will be difficult to answer definitively. One of the most reasonable explanations would be survival value (Argyle, 1972). As one examines the array of nonverbal behaviors, both variant and invariant, the approach-avoidance metaphor, seen from the perspective of preserving species survival, offers an excellent explanation of nonverbal universals. Most of the universals mentioned in this paper could easily be categorized as either approach or avoidance in nature. Those behaviors, such as greeting behaviors, which are "approach," facilitate human contact and therefore help us survive. Avoidance behaviors, such as displays of territorial intrusion or faces of anger, ward off contact and therefore assist us in keeping away from hostile situations. Richmond, McCroskey, and Payne (1987) have a detailed discussion of this concept and include a categorization of numerous verbal and nonverbal behaviors as either avoidance or approach in nature (Richmond, McCroskey and Payne, 1987, pps. 199-200). What better way to preserve species survival than to program into creatures nonverbal universals that compel or repel contact?

The metaphorical level of analysis provided by the approach-avoidance concept is valuable in its parsimonious explanation of external behavior. But still further explanation of universals and elucidation of the cross-cultural communication process can be gained by delving into a deeper structure (Hinde, 1972). "We are likely to get a clearer grasp of the nature of non-speech universals if we move from the superficial level of manifest semantics to the deeper level . . ." (Leach, 1972, p. 333). One might begin a deeper explication of universals by posing the questions, "What is the unifying thread that unites mankind through all its communication -- verbal and nonverbal?" Given the premise that man's communication is a reflection of his conscious and subconscious mind, it is not unreasonable to assume that a common thread might be found which unites all communication universals. The discernment of this link may well be more than a lifetime task. Nevertheless, there is one commonality that might be considered, the existence of opposites (Leach, 1972). On a general level, the all-encompassing approach-avoidance metaphor which accounts for a great deal of human communication behavior (verbal and nonverbal) is an opposite. Leach (1972) also lists some specific nonverbal opposites. Signals of affirmation and denial, male-female sexual symbols, and the binary concept in mathematics are some examples. "Markers of interpersonal domination," such as "superior-inferior," "inversion"-normality, "right-left," "kneeling-prostration" and "standing-sitting" (Leach, 1972, pps. 335-337) are all indications of opposition. He cites other examples dealing with that which marks sexual discrimination, long and short hair, and the distinction between life and death (Leach, 1972). Both verbal and nonverbal opposites underlie the cultural manifestations of the above behaviors.

Research in linguistic and semantic development also substantiates universal opposites. Charles Osgood's (1968) work with semantic space and the bipolar nature of the semantic differential suggest that man's meaning is in terms of opposites.

Manfred Bierwisch (1970) advances some semantic primitives which are rooted in opposites. He notes X greater than Y, X dimensionality to Y, human X -- inanimate X, and X cause Y. Herbert Clark (1973) has extended on Bierwisch's concepts and documented a tendency of humans to verbalize concepts affirmatively, rather than negatively. He studied the encoding and decoding of such opposites as above/below, is/is not, high/low, and wide/narrow. People are more capable of creating and interpreting true affirmative statements as opposed to false negative statements. An elaboration of this concept appears in the research of unmarked and marked concepts. Linguistic marking occurs when a feature is added to a basic form to produce a new form differing from the old by the addition of a single feature. For example, an affirmative statement is unmarked, a negative statement marked. People prefer to use unmarked terms (Deese, 1973). Cross-cultural research indicates this to be a universal phenomenon (Deese, 1973; Miller and McNeill, 1969). Greenberg (1966) has noted some universally unmarked and marked linguistic features. These are singulars, declaratives, affirmatives, present tense and active voice as opposed to plurals, questions, negations, past tense, future tense, and passive voice. Further demonstration of this use of opposites in language is provided by Boucher (1969) who found the use of positive, opposed to negative, terms more frequently in thirteen different languages and cultures. Miller and McNeill (1969) further suggest that unmarked universals should emerge as the basic structures of native languages. One would expect universally unmarked features to be the first emergent language in a child. He would expect these to be the most frequently occurring and most correctly used (Deese, 1973). Thus, research indicates the use of universal opposites in semantic structure where the unmarked term is perferred to the marked.

Still another aspect of communication that displays such use of opposites is in myth and archetype. Myth, like verbal and nonverbal behavior, reflects a deep reality in man. The use of myth is universal. Indeed similar "themes

may be found among different mythologies and certain images that recur . . . tend to elicit comparable psychological responses and to serve similar cultural functions. Such motifs and images are called archtypes" (Guerin, et. al., 1979, p. 157). Numerous examples of opposites occur in this area. Water can represent birth, death, purification but also the unconscious. The sun represents consciousness. The sun can also represent a father, the moon a mother. There is also symbolism in the rising or setting sun. Colors are symbols of opposites. For example, there is the red-white, black-white distinction (Guerin, 1979). There is also the universal use of the light-dark metaphor (Osborn, 1972). Even a circle, when representing the oriental Yang and Yin contains opposites. Other archetypes would be the serpent as evil, the lamb as pure, the Good Mother or the Terrible Mother, the desert as death or water as birth. Frye (1973) identifies several forms of myth that are opposites. He notes the apocalypic myth concerned with gods. Opposing this is the demonic myth dominated by undesirable evil. There is also the romantic myth and its opposite form of realism. Frye also discusses the literary genre and their association with seasons. These are spring/comedy, summer/romance/, fall/tragedy, and winter/irony. The mythical structure in man's communication also carries a theme of opposites.

The concept of opposites is one of the unifying structures in cross-cultural communication. It ties together universals in nonverbal behavior, linguistics and myth. As these communicative behaviors reflect the inner calculus of the mind, surely the notion of opposites must be a concept rooted in the essence of man and his conception of the world. One could hypothesize as to the reason why opposition is so ingrained in humankind. It is the author's opinion that this notion is reflective of a deeper truth about the duality of man's nature and the struggle of good and evil in the universe. But regardless of one's theological

point of view, the search for behavioral universals and the explication of their wellspring should remain the essential goal of cross-cultural communication.

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1. Some movement patterns "are common to all cultures."
2. "Certain syndromes of behavior are qualitatively . . . similiar between cultures."
3. In some instances these may have evolved from pre-human ancestry.
4. "In most of these cases not only the motor patterns . . . but also the motivational . . . basis of the movements and their interpretation by the reactor are similar between cultures."
5. Similarities occur with signals of "person or emotional characteristics."
6. Similarities do not necessarily demand a genetic basis. Experiences common to all humans could be the cause.
7. In many cases there are striking differences between many expressive movements.
8. "Even apparently marked differences between cultures may be the product of differing expressions of cultural universals at a deeper level. . .]

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